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Fish-Schurman Corporation

OPTICAL, TECHNICAL AND SCIENTIFIC GLASS • OPTICAL PARTS AND SPECIALTIES • SCIENTIFIC INSTRUMENTS

70 PORTMAN ROAD, NEW ROCHELLE, N. Y.

TELEPHONE: NEW ROCHELLE 6-1300

SCHOTT INTERFERENCE BAND FILTERS

for the Infrared Spectral Region from 1000-2000mμ

I. Homogeneous Filters

The newly developed interference filters are first order band filters. They are cemented to a suitable colored glass filter for absorbing transmission peaks of higher order. We differenciate between two types of filters:

Infrared Band Filters, Code IR-AL.
Infrared Precision Band Filters, Code IR-PAL.

The location of λm is maintained with an accuracy of ±1% for type IR-AL and of ±0.5% for type IR-PAL.

Maximum transmission (Tmax) of filter types IR-AL and IR-PAL decreases with rising λm from about 50% at 1000mμ to about 20% at 2000mμ.

Half-value width (HW) rises with increasing λm from about 50mμ at 1000mμ to about 100mμ at 2000mμ. Corresponding to our band filters for the visible spectral area, the one-tenth value width is not quite double the half width.

At present, filters are available for the whole region from 1000 – 2000mμ. Later, this area will be limited to standard wave lengths as it has been done for the ultra-violet and visible spectral regions.

Filters IR-AL and IR-PAL are manufactured in standard sizes of 2 x 2" or 50mm diameter. Special sizes can be made to order, and minimum quantities required will be given on request.

Prices for standard size 50mm diameter or 2 x 2":

Type IR-AL	$60.00 each	FOB NEW ROCHELLE
Type IR-PAL	$97.00 each	

II. Continuous Running Filters

Infrared band filters are also available as continuous running filters – Code VERIL IB 200. They have a length of 200mm, and the relation between wave length and location of the spectral colors is nearly completely linear over the spectral region from about 800 to about 2000mμ throughout the total range. Maximum transmission and half-value width correspond with the values given for homogeneous filters.

In order to exclude secondary maxima of shorter wave lengths, filters of type VERIL IB 200 are cemented to several colored glass filters.

Continuous Running Filters VERIL IB 200 are available only in the following size: 200mm length, 25mm width. A calibration curve for each filter is supplied without charge.

Price:	Type VERIL IB 200	$215.00 each	FOB NEW ROCHELLE

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